

CLAIMS:

1. A portable data storage device comprising:

a PCB (printed circuit board), a first fixing seat, a housing, a second fixing seat and a protecting cover, wherein:

5       said PCB is provided with a connector on a front end thereof, and is respectively provided with wings and engaging portions on both sides of a tailing end thereof, said PCB is provided also with a circuit and a memory;

      said first fixing seat has therein a receiving space, and has a  
10       stepped frame respectively provided with positioning holes on both lateral sides thereof for firmly engaging said wings on said tailing end said the PCB; ribs are provided at said positioning holes and are engaged with engaging portions on said tailing end of said PCB;

      said housing is integrally formed of metal, one end of said housing  
15       is adapted for covering said stepped frame of said first fixing seat;

      said second fixing seat is a hollow seat provided with a protruding stop portion, and has another stepped frame provided with engaging hooks on an upper inner wall thereof for insertion for fixed engaging of  
20       said connector of said PCB, a front end of said connector protrudes out of said second fixing seat, said stepped frame is slipped in the other end of said housing;

      said protecting cover covers said connector firmly, and is abutted on said second fixing seat;

      thereby said portable data storage device is formed, and has  
25       features of being easy for assembling, having said steady housing and

having firmness of fixing.

2. The portable data storage device as in claim 1, wherein:

said connector is a USB connecting plug, said memory is a Flash Memory.

5 3. The portable data storage device as in claim 1, wherein:

said housing is an extruded aluminum housing.

4. The portable data storage device as in claim 1, wherein:

said housing is a hollow housing integrally formed by injection of plastic with high strength.

10 5. The portable data storage device as in claim 1, wherein:

said second fixing seat has engaging hooks on a lower inner wall of said stepped frame provided on said second fixing seat.

6. The portable data storage device as in claim 1, wherein:

said first fixing seat has a wall on said protruding stop portion, said  
15 tailing end of said PCB is provided further with notches; when said first  
fixing seat is firmly engaged with said tailing end of said PCB, said  
notches of said PCB are abutted on said wall of said first fixing seat,  
said positioning holes provided on said first fixing seat are engaged  
with said wings on said tailing end of said PCB, said ribs of said first  
20 fixing seat are firmly engaged with said engaging portions on said  
tailing end of said PCB.

7. The portable data storage device as in claim 1, wherein:

said second fixing seat is provided with slits on two inner lateral  
sides of said stepped frame of said second fixing seat for firm  
25 engagement of said front end of said PCB.

8. The portable data storage device as in claim 1, wherein:

said first fixing seat is further provided with two supporting portions respectively on an inner upper and a lower wall of said stepped frame of said first fixing seat for engagement of said tailing end of said PCB to fixedly clamp said end of said PCB.

9. The portable data storage device as in claim 8, wherein:

a stop wall is provided between said two supporting portions, said tailing end of said PCB is tightly abutted against said stop wall; said supporting portions each is further provided with a declined surface in favor of leading in said tailing end of said PCB.

10. The portable data storage device as in claim 1, wherein:

said first fixing seat is further provided with two supporting portions respectively on an inner upper and a lower wall of said stepped frame of said first fixing seat, said supporting portions are spaced away mutually for a predetermined distance for the purpose of adding an related electronic element on said tailing end of said PCB.

11. A portable data storage device comprising:

a PCB, a first fixing seat, a second fixing seat and a protecting cover, wherein:

said PCB is provided with a connector on a front end thereof, and is provided with wings and engaging portions respectively on both sides of a tailing end thereof, said PCB is provided also with a circuit and a memory;

said first fixing seat has therein a receiving space, and has a stepped frame provided with first positioning holes respectively on both

lateral sides thereof for firmly engaging said wings on said tailing end of said PCB; ribs are provided at said first positioning holes and are firmly engaged with engaging portions on said tailing end of said PCB, said stepped frame of said first fixing seat is further provided with  
5 second positioning holes respectively on top and bottom surfaces thereof;

said second fixing seat is a hollow seat integrally formed by injection of plastic for insertion and fixed engaging of a connector of said PCB;

10 a front end of said connector protrudes out of said second fixing seat, said second fixing seat has engaging hooks respectively on an upper and a lower inner wall thereof for fixed engaging in said second positioning holes of said first fixing seat;

said protecting cover covers said connector firmly, and is abutted  
15 on said second fixing seat;

thereby said portable data storage device is formed, and has features of being easy for assembling, having said steady housing and having firmness of fixing.

12. The portable data storage device as in claim 11, wherein:

20 said connector is a USB connecting plug, said memory is a Flash Memory.

13. The portable data storage device as in claim 11, wherein:

said second fixing seat is a plastic sleeve with high strength.

14. The portable data storage device as in claim 11, wherein:

25 said first fixing seat has a wall on said protruding stop portion, said

tailing end of said PCB is provided further with notches; when said first fixing seat is firmly engaged with said tailing end of said PCB, said notches of said PCB are abutted on said wall of said first fixing seat, said positioning holes provided on said first fixing seat are engaged  
5 with said wings on said tailing end of said PCB, said ribs of said first fixing seat are firmly engaged with said engaging portions on said tailing end of said PCB.

15. The portable data storage device as in claim 11, wherein:

said second fixing seat is provided with slits respectively on two  
10 inner lateral sides of said stepped frame of said second fixing seat for firm engagement of said front end of said PCB.

16. The portable data storage device as in claim 11, wherein:

said first fixing seat is further provided with two supporting portions respectively on upper and lower inner walls of said stepped  
15 frame of said first fixing seat for engagement of said tailing end of said PCB to fixedly clamp said end of said PCB.

17. The portable data storage device as in claim 16, wherein:

a stop wall is provided between said two supporting portions, said tailing end of said PCB is tightly abutted against said stop wall; said  
20 supporting portions each is further provided with a declined surface in favor of leading in said tailing end of said PCB.

18. The portable data storage device as in claim 11, wherein:

said first fixing seat is further provided with two supporting portions respectively on upper and lower inner walls of said stepped  
25 frame of said first fixing seat, said supporting portions are spaced away

mutually for a predetermined distance for the purpose of adding an  
related electronic element on said tailing end of said PCB.

5

10

15

20

25